

EFFECTIVE 8/11/94

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION V

IN THE MATTER OF:

UNITED STATES DEPARTMENT OF
ENERGY: PORTSMOUTH
GASEOUS DIFFUSION PLANT
OH7 890 008 983

AND

UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY

AND

OHIO ENVIRONMENTAL PROTECTION AGENCY

ADMINISTRATIVE ORDER
BY CONSENT

U.S. EPA DOCKET NO.
V-W-90-R-03

Proceeding under 3008(h) of the
Resource Conservation and Recovery
Act, as amended, 42 U.S.C.
Section 6928(h) and 106(a) of the
Comprehensive Environmental
Response, Compensation, and
Liability Act, as amended,
42 U.S.C. Section 9606(a).

US ENVIRONMENTAL
PROTECTION AGENCY
REGION V
COLUMBUS, OHIO

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The United States Environmental Protection Agency (U.S. EPA) and the Ohio Environmental Protection Agency (OEPA), and the United States Department of Energy (U.S. DOE) are the parties to this Corrective Action and Section 106(a) Consent Order (Order). This Order pertains to U.S. DOE's Portsmouth Gaseous Diffusion Plant (PORTS) in Piketon, Ohio.

I. STATEMENT OF PURPOSE

This Order is entered into by the parties to ensure compliance by U.S. DOE at PORTS with the Resource Conservation and Recovery Act (RCRA), as amended, 42 U.S.C. Section 6901 et seq., and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended, 42 U.S.C. Section 9601 et seq., and their implementing regulations. In entering into this Order, the mutual objectives of the U.S. EPA, the OEPA and the U.S. DOE are as follows: (1) to perform Interim Remedial Measures (IRM) sufficient to prevent any release of Hazardous Waste, Hazardous Constituents, and/or Hazardous Substances from the Facility; (2) to prepare work plans for: (a) performance of a RCRA Facility Investigation (RFI) to determine fully the

nature and extent of the presence of any release or the potential for future releases of Hazardous Wastes, Hazardous Constituents, and/or Hazardous Substances at or from the Facility; (b) performance of a Corrective Measures Study (CMS) to identify and evaluate alternatives for the appropriate extent of corrective action necessary to prevent or mitigate any migration or release of Hazardous Wastes, Hazardous Constituents, and/or Hazardous Substances at or from the Facility; and (c) any Corrective Measure Implementation (CMI) which is deemed necessary by the U.S. EPA to protect human health or the environment; and (3) to implement the work plans in an expeditious manner to protect human health and the environment.

II. APPLICABILITY

A. This Order shall apply to U.S. DOE, its officers, successors in office, directors, agents, employees, contractors, and subsequent owners and all operators of PORTS in Piketon, Ohio.

B. No change in ownership or corporate or partnership status relating to the Facility will in any way alter U.S. DOE's responsibility under this Order. When originally signed by U.S. EPA and U.S. DOE in September of 1989, OEPA was not a party to this Order. This Order has now been amended to add OEPA as a party.

OEPA is a party to this Order for the purposes of consultation, monitoring, review, and comment activities and the U.S. DOE will reimburse OEPA for its costs directly related to implementation of this Order. OEPA's responsibilities and authorities under this Order are limited to those of consultation, monitoring, review, and comment and do not extend to, for example, approval of U.S. DOE submittals and activities required by this Order. Nothing in this paragraph, or elsewhere in this Order, shall limit, supersede, or in any other way affect OEPA's or U.S. DOE's responsibilities and authorities under the Consent Decree in State of Ohio v. U.S. Department of Energy et al., Case No. C2 89 732 (S.D. Ohio, September 1, 1989).

C. U.S.DOE and U.S. EPA and OEPA shall provide a copy of this Order to all contractors, subcontractors, laboratories, and consultants retained to conduct or monitor any portion of the Work performed pursuant to this Order within seven (7) days of the effective date of this Order or date of such retention.

D. U.S. DOE agrees to give notice of this Order to any subsequent owner and/or operator prior to the transfer of ownership or the obligation of a new contractor/operator and shall simultaneously notify U.S. EPA and OEPA of any such change or transfer.

III. AUTHORITY

The duty of U.S. DOE to operate its facilities in compliance with all Federal, State, interstate, and local requirements, both substantive and procedural, respecting control and abatement of solid waste or hazardous waste disposal is prescribed in Section 6001 of RCRA, 42 U.S.C. Section 6961. U.S. EPA is authorized to order such actions as may be necessary to protect the public health or welfare or the environment as prescribed in Section 106(a) of CERCLA, 42 U.S.C. Section 9606(a). This Order contains a plan to enable U.S. DOE to achieve and maintain compliance with applicable environmental standards. OEPA enters into this Order pursuant to sections 120(a)(4) and 121(f) of CERCLA, RCRA, and Ohio Revised Code Sections 4734.13, 3734.20, 3745.01, and 6111.03.

IV. JURISDICTION

A. Jurisdiction for this action is conferred upon U.S. EPA by Sections 2002(a)(1) and 3008(h) of RCRA, 42 U.S.C. Sections 6912(a)(1) and 6928(h), respectively. The authority vested in the Administrator has been delegated to the Regional Administrators by U.S. EPA Delegation Nos. 8-31 and 8-32 dated April 16, 1985, and further delegated to the Director, Waste Management Division, by U.S. EPA Delegation No. 8-32 dated August 1987. From July 15, 1983, until January 31, 1986, the State of Ohio had Phase I interim authorization pursuant to Section 3006 of RCRA, 42 U.S.C. Section 6926, to

administer a hazardous waste program in lieu of the Federal program. Under this authorization, either the State or U.S. EPA could enforce the authorized Hazardous Waste program requirements, where applicable, in lieu of the Federal program. U.S. EPA retained authority in matters related to the issuance of RCRA permits during this period.

B. With respect to any Hazardous Substance which is not a Hazardous Waste, U.S. EPA enters into this Consent Order pursuant to the authority vested in the President of the United States by Sections 104 and 106(a) of CERCLA, 42 U.S.C. Sections 9604 and 9606(a). The authority of the President to issue this Order has been delegated under Sections 104 and 106(a) of CERCLA, 42 U.S.C. Section 9604 and 9606(a), to the Administrator of U.S. EPA, with the concurrence of the Attorney General, by Executive Order 12580 dated January 23, 1987, 52 Federal Register 2923 (January 29, 1987), and further delegated to the Assistant Administrator for Solid Waste and Emergency Response and the Regional Administrator by U.S. EPA Delegation No. 14-14-C and further delegated to the Associate Division Director of Superfund.

C. With respect to any Hazardous Substance which is not a Hazardous Waste, U.S. DOE enters into this Order pursuant to Sections 104 and 106(a) of CERCLA, 42 U.S.C. Sections 9604 and 9606(a), Executive Order 12580, and the Atomic Energy Act of 1954, as amended, 42 U.S.C. Sections 2011 et seq. U.S. DOE waives any claims or demands for compensation or payment under section 106(b), 111, and 112 of CERCLA against the Hazardous Substance Response Trust Fund established by Section 221 of CERCLA for, or arising out of, any activity performed or expenses incurred pursuant to this Order. This Order does not constitute any decision or preauthorization of funds under Section 111(a)(2) of CERCLA.

V. DEFINITIONS

"CERCLA" means the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. Section 9601 et seq., as amended.

"Consent Order" or "Order" means this Consent Order and all attachments hereto.

"Days" means calendar days, unless business days are specified. Any Submittal, Written Notice of Position or written statement of dispute that under the terms of this Order would be due on a Saturday, Sunday or holiday shall be due on the following business day.

"Effective date" means seven (7) days from the date on which this Order is signed by U.S. EPA.

"Exclusionary Areas" means the interior of Building 345 and that portion of the southwest corner of Building 326 marked "product withdrawal area."

"Facility" shall have the meaning provided in 40 CFR Section 260.10 and Section 101(9) of CERCLA, as amended, 42 U.S.C. Section 9601(9).

"Hazardous Constituents" are the substances listed in Appendix VIII to 40 CFR Part 261 and Appendix IX to 40 CFR Part 264.

"Hazardous Substance" shall have the meaning provided in Section 101(14) of CERCLA, 42 U.S.C. Section 9601(14).

"Hazardous Waste" shall have the meaning provided in Section 1004(5) of RCRA, 42 U.S.C. Section 6903(5).

"Interim Remedial Measure" means any action taken to prevent releases of additional contamination, prevent or reduce the further spread of contamination, and reduce, abate or remove the exposure threat presented by releases, and/or any activity outlined in Section IX.C. and Section IX.E.3.

"Quadrant" means each of the four areas defined by the hydraulic boundaries outlined in Attachment IV.

"Radionuclide" means any facility-related radionuclide including, but not limited to, uranium-234, uranium-235, uranium-238, technetium-99, and protactinium-234; and any nonfacility-related radionuclide including, but not limited to, radon-220, radon-222, radium-226, radium-228, and fall-out related radionuclides.

"RCRA" means the Resource Conservation and Recovery Act, 42 U.S.C. Section 6901 et seq., as amended.

"Solid Waste Management Unit" means any discernable unit that has ever collected, source separated, stored, transported, transferred, processed, treated, or disposed of solid wastes from which Hazardous Constituents may migrate, irrespective of whether the unit was intended for the management of solid wastes or Hazardous Wastes. These units include, but are not limited to, landfills, surface impoundments, waste piles, land treatment units, incinerators, injection wells, tanks, container storage areas and transfer stations. Also considered to be Solid Waste Management Units are certain areas associated with production processes at facilities which have become contaminated as a result of routine, systematic or deliberate releases of Hazardous Wastes or Hazardous Constituents from wastes.

"Submittal" means every permit application, document, report, schedule, deliverable, work plan or other item to be submitted to U.S. EPA and OEPA pursuant to this Order.

"Waste Unit" means all areas used for disposal or spreading of waste oils, all areas which are contaminated by spills or leaks, and all areas defined in Section VI.E.

"Work" means any activity directly related to completing all required or necessary action to achieve the purposes of this Order.

"Written Notice of Position" means a written statement by a party of its position with respect to any matter which any other party may dispute pursuant to Section XXIX of this Order.

VI. FINDINGS OF FACT

U.S. EPA, Region V, makes the following findings of fact:

A. U.S. DOE entered into a management and operating contract with Martin Marietta Energy Systems, Inc., for the operation of certain operations at PORTS, an industrial Facility owned by the U.S. Government. The Facility commenced operations in 1954. Pursuant to the Energy Policy Act of 1992 and a

Lease Agreement effective July 1, 1993, a significant portion of PORTS is leased to the United States Uranium Enrichment Corporation for the purpose of operating a uranium enrichment enterprise. The Facility is located approximately twenty miles north of downtown Portsmouth, Ohio. PORTS operations are located on a 15.4 square kilometer (3700 acres) federally owned site. Several rural communities lie within a few kilometers of the site.

B. The primary function of PORTS is the enrichment of uranium for use in fueling power plants and U.S. Navy vessels. The principal radioactive elements present in waste materials handled at the Facility are uranium and technetium. The principal non-radioactive Hazardous Wastes known to be generated at PORTS are those exhibiting characteristics of ignitability; EP toxicity for chromium, lead, and cadmium (Hazardous Waste Number D001, D007, D008, and D006); and various listed wastes including: spent halogenated solvents such as TCE; spent non-halogenated solvents; as well as small quantities of laboratory chemicals such as vanadium pentoxide, aniline, formaldehyde, formic acid, lead acetate, and thioacetamide (Hazardous Waste Numbers F001, F002, F003, F004, P120, U012, U122, U123, U144, and U218).

C. On August 18, 1980, the U.S. DOE submitted a notification of hazardous waste activity at the Facility as required by Section 3010(a) of RCRA, 42 U.S.C. Section 6930(a) and, on July 12, 1984, the U.S. DOE filed a RCRA Part A permit application as required by Section 3005(a) of RCRA, 42 U.S.C. Section 6925(a), to treat, store, and dispose of Hazardous Waste at the Facility. Subsequently U.S. DOE filed a RCRA Part A permit application revision on September 9, 1988. OEPA transmitted PORT's RCRA Part B Permit Application to the Ohio Hazardous Waste Facility Board on March 18, 1993.

D. Hazardous Waste disposal and storage areas at Portsmouth include the X-616 and X-701B surface impoundments and containment areas, the X-231B land treatment area, the X-749 landfill, and the X-752 container storage area. U.S. DOE has identified thirty-one (31) Solid Waste Management Units including but not limited to those as described below:

X-230 South Holding Pond
 X-230L North Holding Pond
 X-230J5 West Holding Pond
 X-230J6 Northeast Holding Pond
 X-230J7 East Holding Pond
 X-231A Oil Biodegradation Plot
 X-231B Oil Biodegradation Plot
 X-333 PCB Storage Area
 X-342C Waste HF Neutralization Pit
 X-344D HF Neutralization Pit
 X-611A Lime Sludge Lagoon
 X-611B Lime Sludge Lagoon
 X-614A, B, D, and P Sewage Waste Lift Stations
 X-615 Old Sewage Treatment Plant
 X-616 Chromate Reduction Facility
 X-617 Ph Adjustment Facility
 X-701C Neutralization Pit
 X-705A Incinerator
 X-734 Old Sanitary Landfill
 X-735 Sanitary Landfill
 X-740 Waste Oil Handling Facility
 X-749 Contaminated Materials Disposal Facility
 X-749A Classified Materials Disposal Facility
 X-2230M Southwest Holding pond
 X-2230N West Holding Pond
 X-6619 Sewage Treatment Plant
 Northeast Oil Biodegradation Plot
 Construction Spoils Area
 Old Construction Spoils Area
 Peter Kiewit Landfill
 South Holding Pond Waste Pile

E. Other Waste Units include but are not limited to:

X-760 Neutralization Pit
 X-700/X-701/x-705 Underground Pipelines
 X-720 Neutralization Pit
 X-744 Retrievable Waste Storage Area
 X-752 Hazardous Waste Storage Facility
 X-530D Oil House
 X-344A HF Neutralization Pit
 X-533D Oil House

F. On July 8, 1985, and November 12, 1985, U.S. EPA issued Findings of Non-Compliance to U.S. DOE identifying the current RCRA violations and U.S. EPA's major concerns over the environmental impacts associated with PORTS past and present operations.

G. On September 30, 1986, U.S. EPA and U.S. DOE entered into a Federal Facility Compliance Agreement (FFCA) addressing RCRA violations cited in the July 8, 1985, and November 12, 1985, U.S. EPA Findings of Non-compliance.

H. On July 30, 1985, December 10, 1985, June 13, 1986, September 3, 1986, November 19, 1986, March 3, 1987, April 29, 1987, August 26, 1987, September 28, 1987, February 5, 1988, July 1-12, 1988, August 15-16, 1988, and October 27, 1988, conferences were held between U.S. DOE and U.S. EPA representatives to discuss the violations, their adverse environmental impacts, and the steps U.S. DOE has taken and proposes to take to achieve and maintain compliance.

I. U.S. DOE is conducting Hydrogeologic and Groundwater Quality Investigations at the RCRA-regulated X-701B Holding Pond, the RCRA-regulated X-749 Low-Level Radioactive Landfill (recently reclassified as a mixed waste landfill), the RCRA-regulated X-231B Land Treatment Area, and the RCRA-regulated X-616 Chromate Reduction Facility. Results of these studies have documented elevated levels of gross alpha (26.0 pCi/L) and gross beta (2700 pCi/L) radiation in some groundwater samples as well as the presence of at least the following contaminants:

<u>Well #</u>	<u>Contaminant</u>	<u>Concentration ppm</u>
X-701-2	trichloroethylene (TCE)	.003
X-701-3	TCE	.003
X-701-4	TCE	.026
X-701-5	TCE	.008
X-701-5s	TCE	.018
X-701-6	TCE	.057
X-701-7	TCE	320
X-701-7s	TCE	.022
X-701-8	TCE	750
X-701-8s	TCE	44
X-701-9	TCE	790
X-701-10	TCE	7.6
BW-3	TCE	.037
BW-2	TCE	(¹)
X-749-1	TCE	.030
X-749-2	TCE	.48
	1,1 - dichloroethylene (DCE)	.970
	1,1,1 - trichloroethane (TCA)	4.3
	Freon 113	.39
X-749-3	TCE	.61
	DCE	.57
	TCA	1.9
	Freon 113	.7

¹ A 1.65 foot immiscible phase of trichloroethylene (TCE) has been measured in monitoring well BW-2 at the X-701B Holding Pond.

X-749-4	TCE	.25
X-749-5	TCE	.14
	DCE	.026
	TCA	.14
	Freon 113	.083
X-749-6	TCE	.15
	DCE	.027
	TCA	.12
	Freon 113	.092
X-749-7	TCE	3
	DCE	.15
	TCA	.38
X-749-8	TCE	.04
	DCE	.008
	TCA	.037
	Freon 113	.012
X-749-10	TCE	3.4
	DCE	2.3
	TCA	9.4
X-749-11	TCE	.012
X-749-12	TCE	.034
	DCE	.047
	TCA	.39
BG-1	TCE	.003
BG-4	TCE	6.1
	DCE	.81
	TCA	3.1
X-231B-1	TCE	.308
X-231B-5	TCE	.696
X-231B-6	TCE	.345

J. With the exception of Freon 113, all of the contaminants listed in Paragraph I are considered toxic. TCE and 1,1,1-trichloroethane are also considered probable and possible carcinogens, respectively. These Hazardous Wastes, Hazardous Constituents, and Hazardous Substances can affect the central nervous system and damage internal organs at low levels and represent a threat to human health by ingestion and/or absorption. Therefore, the presence of these contaminants may pose a threat to human health and the environment.

VII. DETERMINATIONS BY EPA

Based on the Findings of Fact set forth above, and the administrative record, the Regional Administrator of the U.S. EPA has made the following conclusions of law and determinations:

A. U.S. DOE is subject to all Federal, State, interstate, and local requirements, both substantive and procedural, respecting control and

abatement of solid waste or hazardous waste disposal as set forth in Section 6001 of RCRA, 42 U.S.C. Section 6961.

B. U.S. DOE is subject to the same requirements as a "person" within the meaning of Section 1004(15) of RCRA, 42 U.S.C. Section 6903(15), and Section 101(21) of CERCLA, as amended, 42 U.S.C. Section 9601(21).

C. U.S. DOE is the owner of a Facility that has operated or is operating subject to Section 3005(e) of RCRA, 42 U.S.C. Section 6925(e).

D. Certain wastes and constituents thereof found at the Facility are Hazardous Wastes or Hazardous Constituents as defined by Section 1004(5) of RCRA, 42 U.S.C. Section 6903(5). These are also Hazardous Wastes or Hazardous Constituents within the meaning of Section 3001 of RCRA, 42 U.S.C. Section 6921, and 40 CFR Part 261.

E. There are or have been releases of Hazardous Wastes and Hazardous Constituents from the Facility into the environment within the meaning of Section 3008(h) of RCRA, 42 U.S.C. Section 6928(h), and the issuance of a Corrective Action Order is authorized pursuant to this Section.

F. The PORTS is a Facility within the meaning of Section 101(9) of CERCLA, as amended, 42 U.S.C. Section 9601(9).

G. Certain wastes found at the Facility are Hazardous Substances as defined by Section 101(14) of CERCLA, 42 U.S.C. Section 9601(14).

H. There are or have been releases of Hazardous Substances from the Facility into the environment within the meaning of Section 101(22) of CERCLA.

I. All determinations necessary for the issuance of an Order under Section 106(a) of CERCLA, 42 U.S.C. Section 9606(a), have been made at the Facility.

J. The actions and response measures required by this Order are consistent with RCRA and CERCLA and are necessary to ascertain the nature and extent of the releases from the Facility and to protect human health and the environment.

VIII. COMPUTATION OF TIME

In computing any period of time prescribed in this Order, the day of the act from which the designated period of time begins to run shall not be included.

IX. WORK TO BE PERFORMED

In order to address Hazardous Wastes and Hazardous Constituents pursuant to Section 3008(h) of RCRA, 42 U.S.C. Section 6928(h), and Hazardous Substances pursuant to Section 106(a), 42 U.S.C. Section 9606(a), at the Facility, U.S. DOE agrees to perform the following acts in the manner and by the dates specified herein:

A. All Work to be performed by U.S. DOE pursuant to this Order shall be under the direction and supervision of a qualified project coordinator. Prior to the initiation of any Work at the Facility, U.S. DOE shall notify U.S. EPA and OEPA in writing of the name, title, and qualifications of a proposed project coordinator, and of any contractors and/or subcontractors sought to be used in carrying out the Work.

B. The Work shall consist of four elements: (1) Interim Remedial Measures (IRM); (2) a RCRA Facility Investigation (RFI); (3) a Corrective Measures Study (CMS); and (4) the Corrective Measure Implementation (CMI). All Work undertaken pursuant to this Order shall be performed in a manner consistent, as determined by U.S. EPA, with, at a minimum, EPA approved IRM, RFI, CMS, and CMI Work Plans; RCRA and CERCLA and their implementing regulations; and U.S. EPA guidance documents including, but not limited to, the RCRA Groundwater Monitoring Technical Enforcement Guidance Document (TEGD), September 1986, Test Methods for Evaluating Solid Waste (SW-846), and the RCRA Facility Investigation (RFI) Guidance, July 1987.

C. The Interim Remedial Measures shall include, but not be limited to:

1. Within sixty (60) days of the effective date of this Order, U.S. DOE shall complete and submit to U.S. EPA an evaluation of all process and

industrial wastes produced at the PORTS. (The evaluation shall contain the information required by 40 CFR Section 262.11). The description shall include the source, physical description, treatment, storage, and disposal methods for each waste and a determination of whether each waste is a listed waste under Subpart D of 40 CFR Section 261.30 to Section 261.33, and/or exhibits the characteristics of a Hazardous Waste under Subpart C of 40 CFR Section 261.10 to Section 261.24. The evaluation shall include the radiological characteristics of each waste stream; this shall include the identification of each specific radionuclide and its activity and solubility class. The evaluation of all waste oils generated at the PORTS shall also include analysis to determine the presence of polychlorinated biphenyls (PCBs). Where physical or chemical analyses are conducted to determine the nature of the waste, a copy of all such analyses shall be provided to U.S. EPA. Where analytical data are not used to evaluate such wastes, the basis for the determination of the nature of the waste shall be explained.

2. Within sixty (60) days of the effective date of this Order, U.S. DOE shall prepare and submit to U.S. EPA complete analyses of runoff and any surface leachate observed being discharged from the X-749 landfill. Such analyses shall include a determination of radiological characteristics, including the identification of each specific radionuclide and its activity and solubility class; PCBs; and those parameters found in samples collected from groundwater monitoring wells installed at the Facility.

3. Within one hundred eighty (180) days of the effective date of this Order, U.S. DOE shall complete and submit to U.S. EPA the results of a groundwater quality assessment for RCRA units X-616, X-231B, X-701B and X-749. The assessment report shall comply with the requirements of 40 CFR 265 Subpart F describe the vertical and horizontal rate and extent of migration of any contaminant plumes from RCRA units X-616, X-231B, X-701B and X-749. The report shall include at least a detailed hydrogeologic description of the RCRA units; potentiometric surface maps; geologic cross/sections: fence diagrams:

and isoconcentration maps of the various contaminants emanating from the RCRA units. U.S. DOE shall make available for inspection by U.S. EPA raw data from soil gas monitoring conducted by IEP, Inc. and shall provide copies of such data as requested by U.S. EPA.

4. Within thirty (30) days of the effective date of this Order, U.S. DOE shall, in accordance with 40 CFR Section 265.52 through Section 265.56, modify its Facility contingency plan to describe the actions to be taken by Facility personnel in the event of an unplanned release of Hazardous Waste or Hazardous Constituents to include X-744G and X-326 units, and submit the modified plan, which includes the emergency response function of U.S. EPA and that of communities in the vicinity of the plant, to appropriate Emergency Response authorities.

5. Within thirty (30) days of the effective date of this Order, U.S. DOE shall develop and thereafter shall use an internal tracking system for the categorization and management of Hazardous Wastes generated at PORTS. The internal tracking system shall be designed to document the flow of Hazardous Waste from its point of generation through storage, treatment, or disposal, including the date, time and place of generation, storage, treatment, and disposal. Upon U.S. DOE's development of this system, a description of the system shall be submitted to U.S. EPA.

6. U.S. DOE shall investigate any past or present disposal, placement, and/or discharge of PCBs into soil or water at PORTS. For those locations not included within the RCRA units, Solid Waste Management Units, and other Waste Units listed in Section VI, paragraph D, of this Order, U.S. DOE shall within 270 days of the effective date of this Order, develop a PCB Spill Cleanup Plan consistent with 40 CFR 761 Subpart G, 52 Fed. Reg. 10688, April 2, 1987, as it may be amended from time to time hereafter. U.S. DOE shall submit the plan to U.S. EPA for approval and implement the plan according to the approved schedule. Upon approval by U.S. EPA, the PCB spill Cleanup Plan shall be incorporated into and made a part of this Order.

7. Trichloroethylene (TCE) Report and Removal: U.S. DOE has submitted a report of the Work it has performed to pump and remove TCE from the groundwater in the vicinity of X-701B, and a proposal for further steps to remove, minimize and monitor the TCE. Within thirty (30) days from U.S. EPA's approval of the proposal, U.S. DOE shall begin its implementation.

8. Should U.S. DOE discover evidence of off-site groundwater contaminant migration, U.S. DOE shall immediately notify U.S. EPA and OEPA of this finding and within sixty (60) days of the date of discovery submit to U.S. EPA for approval and to OEPA for comment a plan for the installation of a network of groundwater plume interceptor wells, and manage the contaminated groundwater in a manner consistent with all Federal, State, or local laws, regulations, rules, or ordinances. These activities shall be designed to mitigate a potential threat to human health and/or the environment, be consistent with and integrated into any long term response action at the Facility, and be implemented according to the schedule in the U.S. EPA approved plan. Upon approval by U.S. EPA of the plan for the installation of a network of groundwater plume interceptor wells, the plan shall be incorporated into and made a part of this Order.

D. Attachments I, II, and III to this Order provide Scopes of Work for the completion of an RFI, a CMS, and CMI. These Scopes of Work are incorporated into and made a part of this Order.

E. U.S. DOE shall perform the following activities in conducting the RFI and CMS Work at the Facility:

1. Within forty-five (45) days of receipt of U.S. EPA performance evaluation samples, U.S. DOE shall provide analyses results for laboratory approval.

2. Within forty-five (45) days of receipt of the performance audit analyses, U.S. EPA shall notify U.S. DOE, in writing, of the results of the performance audit. In the event that U.S. DOE fails all or part of the laboratory evaluation, the U.S. EPA may require either the selection of

another laboratory for laboratory approval or analysis of a second set of test blanks by the original laboratory. Ten (10) days will be allowed for the analysis of a second set of test blanks by either the new or the original laboratory.

3. In the event U.S. DOE identifies a current or potential threat to human health or the environment, the U.S. DOE shall immediately notify U.S. EPA and OEPA orally and, if so directed by U.S. EPA, will within thirty (30) days submit to U.S. EPA and OEPA an Interim Measures Plan (IMP) that identifies Interim Remedial Measures which mitigate this threat and are consistent with and integrated into any long term response action at the Facility. This Plan shall include explicit detailed tasks for the implementation of the Interim Remedial Measures including: the objectives of the Interim Remedial Measures; design, construction, operation, and maintenance requirements; and schedules for design, construction, and monitoring. Upon approval by U.S. EPA, the IMP shall be implemented according to the approved schedule. The approved IMP shall be incorporated into and made a part of this Order.

4. Within fifteen (15) days of the effective date of this Order, U.S. DOE shall submit to U.S. EPA for approval a work plan for the RCRA Facility Investigation (RFI Work Plan).

5. In accordance with the Scope of Work in Attachment I, the RFI Work Plan will include: (1) a project Management Plan; (2) a Data Collection Quality Assurance Plan with supporting graphics and flow charts; (3) a Data Management Plan; (4) a Health and Safety Plan; (5) a schedule for submittal of the work plan for each of the four Quadrants (Quadrant RFI Work Plan), including preparation and submission of preliminary and final reports to U.S.; and (6) a Community Relations Plan.

6. The Quadrant RFI Work Plans shall be submitted for approval by U.S. EPA and for comment by OEPA in accordance with the schedule required in Section IX.E.5. The Quadrant RFI Work Plans shall be designed to define the

presence, magnitude, maximum concentrations, extent, direction, and rate of movement of any Hazardous Wastes, Hazardous Constituents, and/or Hazardous Substances, within and beyond the Facility boundary. Each Quadrant RFI Work Plan shall include explicit detailed tasks explaining how U.S. DOE will determine: (1) the presence or absence of Hazardous Wastes, Hazardous Constituents, and/or Hazardous Substances; (2) the nature, extent, and the rate of movement of contamination on and off U.S. DOE's property; (3) the possible routes of migration of Hazardous Wastes, Hazardous Constituents, and/or Hazardous Substances on and off the Facility including characterization of the geology and hydrology of the Facility which delineates possible routes of migration; (4) the extent and potential for migration of Hazardous Wastes, Hazardous Constituents, and/or Hazardous Substances through each of the environmental media; and (5) corrective measure alternatives to remediate any observed and potential contamination. Each Quadrant RFI Work Plan shall include specific schedules for the implementation of all activities described in that Work Plan.

7. U.S. EPA shall notify the U.S. DOE in writing of approval, modification or disapproval of the RFI Work Plan or Quadrant RFI Work Plan or any part thereof. In the event of any disapproval, in whole or part, U.S. EPA shall specify in writing both the deficiencies and any U.S. EPA required modifications regarding the RFI Work Plan or Quadrant RFI Work Plan. OEPA shall notify U.S. DOE of any comments related to the RFI work plan or quadrant RFI work plan or any part thereof.

8. Within thirty (30) days of the receipt of U.S. EPA's notification of disapproval of the RFI Work Plan or Quadrant RFI Work Plan, U.S. DOE shall amend and submit a revised Work Plan to U.S. EPA for review and approval and to OEPA for comment. U.S. DOE shall have the opportunity to meet with U.S. EPA and OEPA to discuss problems with the RFI Work Plan and/or Quadrant RFI Work Plans and to propose alternatives or suggestions to resolve them.

9. U.S. DOE shall implement the Work detailed in the RFI Work Plan and each Quadrant RFI Work Plan as approved by U.S. EPA. The fully approved RFI Work Plan and Quadrant RFI Work Plans shall be incorporated into and made a part of this Order. The RFI Work shall be performed in accordance with the standards, specifications, and schedules contained in the RFI Work Plan and Quadrant RFI Work Plans. Within seven (7) days of receipt of U.S. EPA's full approval of the RFI Work Plan or a Quadrant RFI Work Plan, U.S. DOE shall commence performance of the RFI Work detailed in the approved plan.

10. Within ninety (90) days after U.S. DOE submits to U.S. EPA and OEPA a draft RFI Report for each Quadrant, U.S. DOE shall submit to U.S. EPA for approval and OEPA for comment a work plan for the Corrective Measure Study (CMS Work Plan) for that Quadrant.

11. The CMS Work Plan for each Quadrant will be designed to inform U.S. EPA and OEPA how U.S. DOE will develop and evaluate the corrective action alternative(s) and to recommend the corrective measure(s) to be undertaken at PORTS. The CMS Work Plan shall include tasks 7 through 11 in accordance with the Scope of Work in Attachment II.

12. U.S. EPA shall notify the U.S. DOE in writing of approval, modification or disapproval of the CMS Work Plan or any part thereof for each Quadrant. In the event of any disapproval, in whole or part, U.S. EPA shall specify in writing both the deficiencies and any U.S. EPA required modifications regarding the CMS Work Plan. OEPA shall notify the U.S. DOE in writing of any comments on the CMS work plan or any part thereof.

13. Within thirty (30) days of the receipt of U.S. EPA's notification of disapproval of the CMS Work Plan for a Quadrant, U.S. DOE shall amend and submit a revised Work Plan to U.S. EPA for approval and to OEPA for comment. U.S. DOE shall have the opportunity to meet with U.S. EPA and OEPA to discuss problems with the CMS Work Plan and to propose alternatives or suggestions to resolve them.

14. U.S. DOE shall implement the Work detailed in the CMS Work Plan for each Quadrant as approved by U.S. EPA. The fully approved CMS Work Plan shall be incorporated into and made a part of this Order. The CMS Work shall be performed in accordance with the standards, specifications, and schedules contained in the CMS Work Plan. Within seven (7) days of receipt U.S. EPA's approval of the CMS Work Plan, U.S. DOE shall commence performance of the CMS Work detailed in the approved plan.

F. Upon completion of the final RFI and draft final CMS for each Quadrant in accordance with the terms and specifications of this Order, the final RFI and draft final CMS will be released for public comment for a minimum of thirty (30) days. Within forty-five (45) days of the completion of the public review and comment period, the U.S. EPA shall select the corrective measures to be implemented at the Facility. U.S. EPA shall notify U.S. DOE in writing of the corrective measure(s) to be implemented.

G. Factors which the U.S. EPA may take into consideration in selecting the corrective measures to be implemented will include, but not be limited to, the environmental impact, public health risks, reasonably available, feasible and reliable technology, and public comment. If several corrective measure alternatives achieve the environmental and public health protection deemed necessary by U.S. EPA, the most cost effective corrective measure alternative will be favored by U.S. EPA. The written notification of selected corrective measures shall be incorporated into, and made a part of this Order.

H. U.S. DOE shall perform the following activities in conducting the CMI Work at the Facility:

1. Within forty-five (45) days of receipt of the written notification of the corrective measure(s) to be implemented for each Quadrant, as required in paragraph F of this Section, U.S. DOE shall submit to U.S. EPA for approval and to OEPA for comment, a work plan for corrective measure implementation (CMI Work Plan). The CMI Work Plan shall be based upon the

Scope of Work provided by U.S. EPA in Attachment III and shall include general plans, and a schedule for preparation of design criteria and detailed engineering plans, specifications and construction drawings as necessary to implement the approved cleanup actions, and schedules for selection of contractors, commencement of Work, and completion of Work. Following U.S. EPA approval of each Work Plan, U.S. DOE shall implement the cleanup action in accordance with the approved schedule.

2. The U.S. EPA shall notify the U.S. DOE in writing of approval, modification or disapproval of the CMI Work Plan or any part thereof for each Quadrant. In the event of any disapproval, the U.S. EPA shall specify in writing both the deficiencies and any U.S. EPA required modifications regarding the CMI Work Plan.

3. Within thirty (30) days of receipt of the U.S. EPA's notification of disapproval of the CMI Work Plan or any part thereof for each Quadrant, the U.S. DOE shall amend and submit a revised CMI Work Plan to U.S. EPA for approval and OEPA for comment. U.S. DOE shall have the opportunity to meet with U.S. EPA and OEPA to discuss problems with the CMI Work Plan and to propose alternatives or suggestions to resolve them.

4. The U.S. DOE shall implement the Work detailed in the CMI Work Plan for each Quadrant as approved by the U.S. EPA. The fully approved CMI Work Plan shall be incorporated into and made a part of this Order. The Work shall be conducted in accordance with the standards, specifications, and schedules contained in the CMI Work Plan. Within seven (7) days of receipt U.S. EPA's final written approval of the CMI Work Plan, the U.S. DOE shall commence performance of the Work detailed in the approved plan.

X. REVIEW OF SUBMITTALS

A. All submittals made to U.S. EPA and OEPA, and all RFI, CMS and CMI Work performed by U.S. DOE, are subject to the review, modification, and approval of U.S. EPA and the review and comment of OEPA. U.S. EPA retains the right to amend reports, perform additional Work, and to conduct the RFI, CMS,

and/or CMI if U.S. EPA decides any of the above are necessary. U.S. DOE agrees to make such modifications requested by U.S. EPA.

B. The U.S. DOE shall provide monthly written progress reports to the U.S. EPA and OEPA. At a minimum these progress reports shall: (1) describe the actions which have been taken toward achieving compliance with this Order; (2) include all results of sampling and tests and all other data generated or received during the period; and (3) include a summary of all plans and procedures completed during the past month, as well as such actions, data collection, and plans which are scheduled for the next month. These reports are to be submitted to the U.S. EPA and OEPA by the tenth day of each month following the effective date of this Order. Any modifications by U.S. EPA, or alterations of such monthly progress reports concerning any future actions, data collection or plans shall be incorporated by the U.S. DOE into future actions at the Facility.

C. U.S. DOE shall provide draft, draft final, and final IRM, RFI, CMS, and CMI reports to the U.S. EPA and OEPA in accordance with schedules contained in the approved plans.

D. The review process of each permit application, document, report, deliverable, work plan or schedule (collectively referred to as "submittal") submitted by U.S. DOE to U.S. EPA and OEPA under this Order, shall proceed as follows:

1. Within twenty-one (21) calendar days after U.S. EPA receives a submittal from U.S. DOE, U.S. EPA shall notify U.S. DOE whether the submittal contains information sufficient for U.S. EPA's review; or whether and in what respects, if any, the submittal is deficient in the amount or type of information it provides.

2. Within thirty (30) calendar days after U.S. EPA has notified U.S. DOE that a submittal contains information sufficient for U.S. EPA's review, U.S. EPA shall notify U.S. DOE in writing of the results of its review.

3. Within thirty (30) calendar days of receipt by U.S. DOE of any notice by U.S. EPA of the substantive deficiency of any submittal, U.S. DOE shall submit revisions.

4. If U.S. EPA or OEPA shall be unable to meet the review commitments within the times stated above, that agency shall provide notice and an explanation to the other Parties to this Order within the times stated of its inability to meet the commitment and projected date for meeting its commitment. Such failure to make timely review shall result in an adjustment of affected schedules for a period determined or approved by U.S. EPA.

E. Five (5) copies of all documents, including draft and final reports, and other correspondence to be submitted by U.S. DOE pursuant to this Order shall be hand delivered or sent by certified mail, return receipt requested, to the Project Coordinators designated pursuant to Section XVI of this Order.

F. Where OEPA provides comments to U.S. DOE on any submittal pursuant to the Consent Decree between the State of Ohio and U.S. DOE in State of Ohio v. U.S. Department of Energy et. al., Case No. C2 89 732, OEPA is not required to provide U.S. DOE a second set of comments or a second copy of the comments on the same submittal pursuant to this Order. Where U.S. DOE provides any submittal pursuant to the Consent Decree between the State of Ohio and the U.S. DOE in State of Ohio v. U. S. Department of Energy et. al., U.S. DOE is not required to provide to OEPA a second copy of the submittal pursuant to this Order. OEPA's provision of comments pursuant to this Order shall not supersede any of U.S. DOE's obligations to obtain OEPA comments and approvals pursuant to the Consent Decree.

XI. ADDITIONAL WORK

A. The U.S. EPA, in order to achieve the purposes of this Order, may determine that Work in addition to that detailed in the attached Scopes of Work, including investigatory Work and/or engineering evaluation, is necessary as part of an IMP, RFI, CMS, or CMI. The U.S. DOE shall implement any

additional Work which the U.S. EPA determines to be necessary, and shall complete such additional Work in accordance with the standards, specifications, and schedule determined or approved by the U.S. EPA.

B. Any dispute arising as to the performance of additional Work directed by U.S. EPA shall be resolved in accordance with the procedures set forth in Section XXIX. If the U.S. EPA determines that such additional Work is necessary, U.S. EPA shall request in writing that U.S. DOE perform the additional Work and shall specify the basis and reasons for U.S. EPA's determination that the additional Work is necessary. Within ten (10) days after the receipt of such request, U.S. DOE shall have the opportunity to meet with U.S. EPA to discuss the additional Work U.S. EPA has requested and to propose alternatives. Within five (5) days of this meeting or the receipt of U.S. EPA's request for additional Work, whichever is later, U.S. DOE will notify U.S. EPA and OEPA in writing of its decision whether or not it intends to submit the matter for Dispute Resolution.

C. Within forty-five days of receipt of U.S. EPA's written request to perform additional Work, or within forty-five days of a final determination that the Work is required if the Dispute Resolution procedures of Section XXIX are invoked, U.S. DOE shall submit for approval to U.S. EPA and for comment to OEPA, a work plan for additional Work. U.S. DOE shall perform the additional Work according to the U.S. EPA approved work plan. The U.S. EPA approved work plan for additional Work shall be incorporated into and made a part of this Order. All additional Work performed by U.S. DOE under this paragraph shall be performed in a manner consistent with this Order.

D. Should U.S. DOE determine that additional Work is necessary to achieve the purposes of this Order, U.S. DOE shall submit to U.S. EPA for approval and to OEPA for comment, U.S. DOE's plan and schedule for performing such Work.

XII. QUALITY ASSURANCE

Throughout all sample collections and analysis activities required by this Order, U.S. DOE shall use U.S. EPA-approved quality assurance, quality control, and chain-of-custody procedures, which shall be part of proposed and approved work plans. In addition, U.S. DOE shall:

A. Follow the U.S. EPA guidance for sampling and analysis contained in the RCRA Groundwater Monitoring Technical Enforcement Guidance Document (TEGD), September 1986, and Test Methods for Evaluating Solid Waste (SW-846).

B. Consult with U.S. EPA and OEPA in planning for, and prior to, field sampling and laboratory analysis.

C. Inform the U.S. EPA and OEPA Project Coordinators in advance which laboratories will be used by U.S. DOE and ensure that U.S. EPA and OEPA personnel and U.S. EPA and OEPA authorized representatives have reasonable access to the laboratories and personnel used for analyses.

D. Ensure that laboratories used by U.S. DOE for analyses perform such analyses according to U.S. EPA methods (SW-846). If methods other than U.S. EPA methods are to be used, U.S. DOE shall submit all protocols to be used for analyses to U.S. EPA and OEPA in the QAPP element of the work plan.

E. Ensure that laboratories used by U.S. DOE for analyses participate in a quality assurance/quality control program equivalent to that which is followed by U.S. EPA. As part of such a program, and upon request by U.S. EPA, such laboratories shall perform analysis of a reasonable number of known samples provided by U.S. EPA to demonstrate the quality of analytical data.

F. Use the U.S. EPA guidance to evaluate all data to be used in the work plans including what is collected prior to U.S. EPA approval of the work plans required by Section IX of this Order. This evaluation shall be provided to U.S. EPA as part of the work plans required by Section IX of this Order, and shall be updated as necessary.

XIII. PUBLIC COMMENT AND COMMUNITY RELATIONS

A. Following proposed modification or proposed approval by U.S. EPA of the CMS draft Final Report for each Quadrant, U.S. EPA shall make both the RFI Final Report and CMS draft Final Report and U.S. EPA'S justification for selecting the proposed remedy available to the public for review and comment for at least thirty (30) days.

B. Following the public review and comment period, U.S. EPA shall notify U.S. DOE which alternative corrective measure is selected, if any. If the Corrective Measure proposed and tentatively scheduled by U.S. EPA after review of the CMS draft Final Report is not the corrective measure approved by U.S. EPA after consideration of public comments, U.S. EPA shall inform U.S. DOE, in writing, of the reasons for such decision.

C. The complete Administrative Record supporting the selection of the corrective measure will be available for public review at Waverly Public Library in Pike County when the CMS draft Final Report for each Quadrant is released for public comment.

XIV. CORRECTIVE MEASURE IMPLEMENTATION

Upon completion of the RFI and CMS in accordance with the terms and specifications of this Order, and after completion of the public review and comment period, the U.S. EPA in consultation with OEPA shall select the corrective action to be implemented at the Facility. The U.S. EPA shall then notify the U.S. DOE, in writing, of the selected corrective action. U.S. DOE shall perform the selected corrective action in accordance with the terms and specifications of Section IX, Paragraph H.

XV. PROJECT COORDINATORS

A. All Work performed pursuant to this Order shall be under the direction and supervision of a Project Coordinator appointed by U.S. DOE who shall be a qualified professional engineer or person otherwise qualified to supervise the activities to be performed hereunder. Prior to the initiation of Work at the Facility, U.S. DOE shall notify U.S. EPA and OEPA in writing of

the name, title and qualifications of the Project Coordinator, and of any known contractors and/or subcontractors to be used in carrying out the terms of this Order.

B. Within ten (10) days of the effective date of this Order, U.S. EPA shall designate its Project Coordinator, who shall be responsible for overseeing implementation of this Order. Within ten (10) days of the effective date to the modification of this Order, OEPA shall designate its Project Coordinator, who shall be responsible for overseeing OEPA's activities under this Order.

C. To the maximum extent feasible, communications between U.S. DOE, U.S. EPA and OEPA shall be made between Project Coordinators. The Project Coordinators shall operate by agreement whenever possible and attempt to resolve disputes informally. It is acknowledged that the U.S. EPA Project Coordinator shall have the authority to halt or direct any task required hereunder to protect public health or welfare or the environment should an emergency situation arise at the Facility.

D. The absence of the U.S. EPA or OEPA Project Coordinators from the Facility shall not be cause for stoppage of Work.

E. The parties agree to provide at least 7 days written notice prior to changing Project Coordinators.

XVI. NOTICES

Documents, including reports, approvals or disapprovals, and other correspondence, to be submitted pursuant to this Order, shall be sent by certified mail to the following addresses, or to such addresses as the U.S. DOE, the U.S. EPA or OEPA hereafter may designate in writing:

1. Documents to be submitted to the U.S. EPA Project Coordinator should be sent in duplicate to:

U.S. EPA, Region V
Waste Management Division
77 West Jackson Boulevard
Chicago, Illinois 60604-3590
Attention: Sheri Bianchin (HRE-8J)

2. Documents to be submitted to the U.S. DOE Project Coordinator should be sent to:

Eugene W. Gillespie, Site Manager
U.S. DOE
3930 U.S. Route 23
P.O. Box 700
Piketon, Ohio 45661

3. Documents to be submitted to the OEPA Project Coordinator should be sent to:

Project Coordinator, DOE Portsmouth Site
Ohio EPA
2195 Front Street
Logan, Ohio 43138

XVII. COMPLIANCE WITH APPLICABLE LAWS

Nothing herein shall affect the U.S. DOE's obligation to comply with any applicable Federal, State or local law, regulation, rule or ordinance. The U.S. DOE shall be responsible for obtaining all Federal, State or local permits which are necessary for the performance of the work.

XVIII. ACCESS

A. 1. U.S. EPA, OEPA and/or any U.S. EPA or OEPA representative, including U.S. EPA or OEPA contractors, are authorized in a manner consistent with 10 CFR Parts 1016 and 1017 to enter and freely move about all property at the Facility related to Work performed under this Order, for the purposes of inter alia: interviewing Facility personnel and contractors; inspecting records, operating logs, and contracts related to Work performed under this Order; reviewing the progress of U.S. DOE in carrying out the terms of this Order; conducting such sampling and tests as U.S. EPA or OEPA or their representatives deem necessary; and verifying the reports and data submitted to U.S. EPA and OEPA by U.S. DOE. The U.S. DOE shall permit such persons to inspect and copy all records, files, photographs, documents, and other writings, including all sampling and monitoring data, that pertain to Work undertaken pursuant to this Order, and shall comply with all approved health and safety plans required by Task 3 of Attachment I to this Order. If the use

of a camera, sound recording or other documentary-type equipment is determined to be required by U.S. EPA or OEPA, U.S. DOE will provide these services upon request.

2. U.S. DOE represents and agrees that no Work to be performed under this Order will require "access authorization" or "security clearance" as defined in 10 CFR Sections 1016 and 1017. Consequently, consistent with the access procedures in this Section, U.S. EPA and OEPA representatives will be granted access, when accompanied by an escort, to all areas where Work is being performed under this Order. If either U.S. EPA or U.S. DOE proposes to add Additional Work in accordance with Section XI which involves Work in Exclusionary Areas, U.S. EPA or OEPA representatives will be granted access consistent with 10 CFR Parts 1016 and 1017.

3. U.S. DOE or its management and operating contractor will provide, without advance notice, escorts for U.S. EPA and OEPA representatives who are seeking access to the Facility in accordance with the terms and conditions of this Order. Such escorts will be made available to facilitate the movement of U.S. EPA and OEPA representatives about the site and is not to be construed as in any way limiting the ability of U.S. EPA and OEPA representatives from obtaining access to areas of Work under this Order.

4. U.S. EPA, OEPA, their representatives and contractors shall comply with all approved health and safety plans.

B. To the extent that Work required by the work plans must be done on property not owned by U.S. DOE, U.S. DOE will use its best efforts to obtain site access agreements from the present owner(s) of such property within forty-five (45) days of approval of the work plans. U.S. DOE agrees to exercise its authorities pursuant to Section 104(e) of CERCLA, as amended, 42 U.S.C. Section 9604(e), when necessary to obtain access from the present owners and/or lessees. With respect to property not owned/leased by U.S. DOE and upon which any monitoring wells or other response actions are to be located, any access agreements obtained by U.S. DOE after the signing of this

Consent Order shall provide for written notice to U.S. DOE before a conveyance of title, easement, or other interest in the property is consummated. In the event that property to which U.S. DOE has obtained access is subsequently conveyed or leased to a third party, U.S. DOE shall use its best efforts to obtain access from the new owner/lessee so that delays or disruptions in work or other response actions are minimized. Any such access agreement shall be incorporated by reference into this Order. In the event that agreements for site access are not obtained within forty-five (45) days of the effective date of this Order, U.S. DOE shall notify U.S. EPA regarding both the lack of and its failure to obtain such agreements within fourteen (14) days thereafter.

C. Nothing in this Section limits or otherwise affects U.S. EPA's or OEPA's right of access and entry pursuant to applicable law, including RCRA and CERCLA and State Law.

XIX. SAMPLING AND DATA/DOCUMENT AVAILABILITY

A. U.S. DOE shall make available to U.S. EPA and OEPA all results of sampling, tests, or other data generated by or on its behalf with respect to the implementation of this Order. U.S. DOE shall submit these results in progress reports described in Section X of this Order. Similarly, upon request, U.S. EPA or OEPA will make available to the U.S. DOE the results of sampling or tests generated pursuant to this Order by U.S. EPA or OEPA within forty-five (45) days after any such results or data pass U.S. EPA or OEPA quality assurance review.

B. 1. U.S. EPA and OEPA and/or their representatives may come into possession of classified information in the course of carrying out its duties under this Order. Classified information, for purposes of this provision, shall mean information appropriately marked as "top secret", "secret", and "confidential", as defined in Executive Order No. 12356, Section 1.1, or "unclassified controlled nuclear information" as defined in 10 CFR Part 1017. U.S. EPA or OEPA shall notify DOE immediately and comply with U.S. DOE's direction concerning the proper handling and disposition of any classified

information. U.S. DOE will provide such guidance as soon as practicable upon notice from U.S. EPA or OEPA and/or their representatives.

2. The U.S. DOE may assert a confidentially claim, if appropriate, covering part or all of the information requested by this Order. Analytical data shall not be claimed as confidential by the U.S. DOE. Information determined to be confidential will be afforded the protection specified in 40 CFR Part 2, Subpart B.

C. U.S. DOE shall notify U.S. EPA and OEPA at least fifteen (15) days before conducting any well drilling, installation of equipment, or sampling. This notice provision may be waived by written mutual agreement of the Project Coordinators and/or their alternates exchanged prior to the commencement of any such activity. The monthly progress report received at least fifteen (15) days prior to the commencement of the specified field activity may be considered sufficient notice under this provision. At the request of the U.S. EPA or OEPA, U.S. DOE shall allow split or duplicate samples to be taken by U.S. EPA or OEPA of any samples collected by U.S. DOE pursuant to this Order.

D. In any subsequent administrative or legal action enforcing the terms of this Order or enforcing implementation of any subsequent corrective action alternative selected for the Facility, the U.S. DOE, U.S. EPA and OEPA waive evidentiary objections, except for relevancy, to the admissibility into evidence of data gathered or generated pursuant to this Order that have been verified by the quality control/quality assurance procedures in the QAPP approved by U.S. EPA. U.S. DOE, U.S. EPA, or OEPA may object to a specific item of evidence if the objecting party demonstrates that such item of evidence was not gathered in accordance with the sampling and analytical procedures contained in the QAPP.

XX. RECORD PRESERVATION

During the pendency of this Order and for a period of seven (7) years after its termination, U.S. DOE agrees to retain and maintain and, upon request, make available to U.S. EPA and OEPA all records and documents in its possession, custody, or control, including, but not limited to, documents embodying or relating to the results of sampling, tests, Hazardous Waste management and disposal at the Facility, or other data or information generated or acquired by U.S. DOE, or on U.S. DOE's behalf, which relate to the performance of this Order. At the conclusion of seven (7) years, U.S. DOE shall then make such records available to U.S. EPA and OEPA for inspection or U.S. EPA's or OEPA's retention or shall provide copies of any such records to U.S. EPA and OEPA. U.S. DOE shall notify U.S. EPA and OEPA thirty (30) days prior to the destruction of any such records, and shall provide U.S. EPA and OEPA with the opportunity to take possession of any such records.

U.S. DOE further agrees that within five (5) days of the effective date of this Order or of retaining or employing an agent, consultant or contractor, whichever comes first, U.S. DOE will enter into an agreement, to be confirmed in writing within fifteen (15) days, with its agents, consultants and/or contractors whereby its agents, consultants, and/or contractors will be required to deposit with U.S. DOE, or its representative or contractor, for maintenance and preservation all records and documents within their respective possession which relate in any way to this Order.

XXI. REIMBURSEMENT OF OEPA EXPENSES

A. U.S. DOE shall request funding and reimburse OEPA for the costs of monitoring work ("Work") directly related to implementation of this Order, including but not limited to the costs of payroll, fringe, indirect, review of activity data sheets, travel, sampling, laboratory analysis, data management, safety and general equipment, supplies and general maintenance. This reimbursement shall be subject to the conditions and limitations set forth in this Section and Section XXII below (Funding). OEPA costs related to State

activities conducted pursuant to the Consent Decree in State of Ohio v. U.S. Department of Energy, et al., Case No. C2 89 732 (S.D. Ohio 1989) shall not be excluded from reimbursement pursuant to this Section if these activities are also directly related to Work under this Order.

B. Reimbursable costs shall consist only of expenditures actually made by OEPA in providing the following assistance to PORTS:

1. Technical review and substantive comment on reports or studies which U.S.DOE prepares in support of its site cleanup actions and submits to
OEPA or any other technical review in support of this Order.
2. Identification and explanation of State requirements applicable to federal facilities in performing Work, especially State applicable or relevant and appropriate requirements (ARARs).
3. Field visits to ensure investigations and cleanup activities are implemented in accordance with appropriate OEPA requirements, or in accordance with agreed upon conditions between OEPA and U.S. DOE that are established in the framework of this Order. This shall include review of draft data in order to analyze and guide fieldwork.
4. Support and assistance to U.S. DOE in the conduct of public participation activities in accordance with Federal and State requirements for public involvement.
5. Preparation for and participation in technical meetings.
6. Laboratory costs incurred as a result of split sampling performed in order to validate U.S. DOE's investigations under this Order.
7. Review of U.S. DOE's cost estimates and scheduling documents associated with the cleanup program, including site-specific Activity Data Sheets and Five Year Plans.
8. Other activities specified in this Order.

C. A separate grant shall be the specific mechanism for transfer of funds between U.S. DOE and OEPA for payment of the costs referred to herein.

D. On an annual basis, (1) OEPA shall submit, in a timely fashion and in writing, to U.S. DOE a grant application including a proposed Scope of Work and estimates of costs to be incurred relating to the Work, as defined herein, to be performed under this Order by OEPA for the upcoming year, and (2) subsequent to negotiation between U.S. DOE and OEPA, U.S. DOE shall make a grant award. These actions shall be performed utilizing the procedures of 10 C.F.R. Part 600 Subparts A, D, and E with the following exceptions:

1. Notwithstanding 10 CFR Section 600.405, U.S. DOE shall not impose any additional requirements on this cost reimbursement except with the written consent of OEPA.
2. OEPA shall remit to U.S. DOE interest earned on advances as necessary and where required by the Cash Management Improvement Act and its implementing regulations, 31 CFR Part 205, which shall apply in lieu of 10 CFR Section 600.421(i).
3. U.S. DOE payments shall be made in advance in accordance with 10 CFR Section 421(c).
4. Pursuant to 10 CFR Section 600.443(a)(i), U.S. DOE may temporarily withhold a cash payment pending correction of any material noncompliance related to that cash payment. U.S. DOE may use the noncompliance and enforcement remedies of 10 CFR Part 600 Subparts A, D, and E including but not limited to those in Sections 600.29 and 600.43, to prevent the expenditure by OEPA of money on expenses not authorized by Paragraph XXI A. and B. above or to recover money spent by OEPA on such unauthorized expenses. U.S. DOE shall not suspend or terminate grant payments for expenses authorized by Paragraph XXI A. and B. above. U.S. DOE shall not use its noncompliance and enforcement remedies against OEPA for any punitive purposes unless necessary to address fraud. Any

withholding, suspension, or termination of payment of costs pursuant to 10 CFR Part 600 Subparts A, D, or E shall be subject to the informal dispute resolution and appeals procedures as described in Paragraph XXI E. and F. below.

E. In the event that U.S. DOE contends that any costs incurred were not directly related to the implementation of this Order, or were incurred in a manner inconsistent with Federal law or the grant award, U.S. DOE may challenge the costs allowable under the grant to OEPA. Whenever practicable, U.S. DOE and OEPA shall attempt to resolve informally any dispute over the award or administration of financial assistance including any matter controlled by this Section. U.S. DOE and OEPA representatives may initiate the informal process by requesting that the involved parties attempt to resolve any issue covered by this Section. Such informal resolution shall begin with the representative of the U.S. DOE contracting officer who signed the grant to the State agency implementing the cost recovery provisions of this Order and the contract representative of OEPA attempting to resolve the issue. If they are not successful, they may elevate the issue to the cognizant Contracting Officer for purposes of dispute resolution pursuant to 10 CFR Section 600.26(a), and the Fiscal Officer for the Division of Emergency and Remedial Response of OEPA for resolution. If these parties are unable to agree on resolution, each of the involved parties will issue a written decision setting forth their position on the issue. The written position of U.S. DOE shall be deemed to be the Contracting Officer's determination from which a formal appeal may be taken. This written position will be issued within 21 days after the parties agree that they are unable to informally resolve the issue.

F. If unresolved after conclusion of informal dispute under Paragraph E of this Section, OEPA's demand and U.S. DOE's challenge may be resolved through the appeals procedures set forth in 10 CFR Section 600.443(b) and 10 CFR Part 1024 as modified below:

1. The procedure of appeal shall be the method specified in 10 CFR Section 1024.3(d)(1), regardless of the amount in dispute.
2. Unless OEPA requests a hearing, OEPA shall not be required to make any appearances outside of Dayton or Columbus, Ohio in exercising appeal procedures under 10 CFR Part 1024.
3. Notwithstanding Rule 5(a)(4) of the Rules of Procedure of the U.S. DOE Financial Assistance Appeal Board, OEPA may seek to recover the contested costs through any other mechanism available to the State if the Board's decision has not been issued within ninety (90) days after all submissions are filed or after the time for filing has expired, whichever occurs earlier.

G. Subject to Paragraph XXI H and I., U.S. DOE shall not be responsible under the terms of this Order for reimbursing OEPA for any costs actually incurred in excess of the maximum U.S. DOE obligation as defined in the grant award. Any invoiced amounts exceeding the maximum U.S. DOE obligation shall roll over into the next grant period.

H. OEPA's performance of its obligations under this Order shall be excused if its response costs as defined herein are not paid as required by this Section XXI.

I. OEPA reserves any right it may have to recover costs for matters not reimbursable pursuant to this Order and the grant award, costs not reimbursed by U.S. DOE pursuant to Paragraph XXI after exhaustion of the appeals procedures described in Paragraph XXI E and F., costs in excess of the maximum U.S. DOE obligation in the grant award, or costs not being paid because U.S. DOE and OEPA have been unable to successfully conclude negotiations on the terms or language of the grant award.

J. Within sixty (60) days of signing the modification to this Order, U.S. DOE shall reimburse the State for preaward costs of its activities at PORTS, which are consistent with the activities required by this Order, incurred as of November 17, 1993 in the amount of \$671,625. State costs

incurred after this date shall be reimbursed pursuant to Paragraphs XXI A-I above.

XXII. FUNDING

It is the expectation of the Parties to this Order that all obligations of the U.S. DOE arising under this Order will be fully funded. The U.S. DOE shall take all necessary steps and use its best efforts to obtain timely funding to meet its obligations under this Order. U.S. DOE shall advise U.S. EPA and OEPA of its efforts to obtain the funding necessary to implement this Order. This requirement shall include, but not be limited to, U.S. DOE providing U.S. EPA and OEPA a copy of its annual report to Congress which includes the specific cost estimates and budgetary proposals associated with the implementation of this Order.

U.S. DOE's performance of the commitments under this Order is subject to the availability of appropriated funds for such purposes. Failure to obtain adequate funds or appropriations from Congress does not, in any way, release U.S. DOE from its obligations to comply with RCRA and CERCLA. In cases where payment or obligation of funds would constitute a violation of the Anti-Deficiency Act, 31 U.S.C. Section 1341, the schedule established under this Order requiring the payment or obligation of such funds shall be appropriately adjusted. If appropriated funds are not available to fulfill requirements of the Order, U.S. EPA and OEPA reserve the right to initiate such action as they deem appropriate to the extent permitted by law.

XXIII. RESERVATION OF RIGHTS

A. OEPA expressly reserves all rights and defenses it may have under Federal, State, or local law and including the Consent Decree between the State of Ohio and U.S. DOE in State of Ohio v. U.S. Department of Energy, et al., Case No. C2 89 732. U.S. EPA expressly reserves all rights and defenses that it may have, including the right both to disapprove of work performed by U.S. DOE and to request, in accordance with Section XI, that U.S. DOE perform tasks in addition to those stated in the work plans. In

consideration of U.S. DOE's compliance with this Order, and based on the information known to the Parties on the effective date of this Order, U. S. EPA agrees that compliance with this Order shall stand in lieu of any civil remedies, including administrative, legal and equitable, against U.S. DOE, its employees, its contractors or their employees, available under current law to U.S. EPA regarding the currently known releases or threatened releases of hazardous substances, pollutants, contaminants, and hazardous constituents at PORTS which are the subject of activities performed by U.S. DOE under this Order. Nothing in the Order shall preclude U.S. EPA from exercising any administrative, legal and equitable remedies available (including the assessment of civil penalties and damages if such are otherwise legally assessable) to require additional response action by U.S. DOE in the event that the implementation of the requirements of this Agreement is no longer protective of public health or the environment.

B. Compliance by U.S. DOE with the terms of this Order shall not relieve U.S. DOE of its obligations to comply with RCRA or any other applicable State or Federal law. U.S. EPA and OEPA reserve the right to take an enforcement action pursuant to RCRA, CERCLA and/or any available legal authority against U.S. DOE or its contractors/operators of PORTS for violations of applicable laws or regulations. Nothing in this Order shall preclude U.S. EPA or OEPA from exercising any administrative, legal and equitable remedies available to them to require additional response actions by U.S. DOE in the event that: (1) conditions previously unknown or undetected by U.S. EPA and OEPA arise or are discovered at the Facility; or (2) U.S. EPA or OEPA receives additional information not previously available concerning the premises which it employed in reaching the terms of this Order, and the implementation of the requirements of this Order are no longer protective of human health and the environment.

C. U.S. EPA and OEPA reserve the right to perform any portion of the Work agreed to herein or any additional site characterization, feasibility

study, and response/corrective actions as either of them deem necessary to protect public health or welfare or the environment. Absent an immediate hazard, U.S. EPA and OEPA will not perform Work agreed to herein if U.S. DOE is performing said Work in a timely and satisfactory manner. U.S. EPA shall determine whether U.S. DOE is performing said Work in a timely and satisfactory manner for purposes of compliance with this Order. However, this Paragraph does not preclude OEPA from performing any of the activities described in this Paragraph or other activities under authority other than this Order, as more fully described in Paragraph XXIII.D below. Notwithstanding compliance with the terms of this Order, U.S. DOE is not released from liability, if any, for the costs of any response actions taken by U.S. EPA.

D. On September 1, 1989, the U.S. District Court for the Southern District of Ohio approved and filed a Consent Decree between the State of Ohio and U.S. DOE in State of Ohio v. U.S. Department of Energy, et al., Case No. C2 89 732. It is the position of OEPA that this Consent Decree and the application of state law to PORTS are in no way preempted or otherwise impaired or affected by federal law or this Order. By signing and participating in this Order, OEPA reserves and does not waive any rights it may have to enforce any provisions of the Consent Decree or state law at PORTS. OEPA's signing and participation in this Order shall be without prejudice to the position of any party on this issue and OEPA's signing and participation shall not be used by any of the parties as support for its position on this issue. Nothing in this Order shall constitute a modification of dispute resolution procedures pursuant to Paragraph 12.9 of the Consent Decree or a modification of any other provision of the Consent Decree.

XXIV. OTHER CLAIMS AND PARTIES

Nothing in this Order shall constitute or be construed as a release from any claim, cause of action or demand in law or equity against any person, firm, partnership, or corporation not a signatory to this Order for any

liability it may have arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any Hazardous Constituents, Hazardous Substances, Hazardous Wastes, pollutants, or contaminants found at, taken to, or taken from the Facility.

XXV. ENFORCEABILITY

A. U.S. DOE recognizes its obligations to comply with RCRA, as set forth in Section 6001 of RCRA, 42 U.S.C. Section 6961. U.S. DOE in no way waives any defenses U.S. DOE may have or wish to pursue in any action outside the terms of this Order with the exception that U.S. DOE agrees not to contest U.S. EPA's jurisdiction to issue this Order. Nothing in this Order shall constitute an admission on the part of U.S. DOE or any other party, in whole or in part, in any proceeding or litigation including those between U.S. DOE and any other party or agency except in proceedings to enforce this Order.

B. The provisions of this Order including those related to statutory requirements, regulations, permits, closure plans, or corrective action, including recordkeeping, reporting, and schedules of compliance, shall be enforceable under citizen suits pursuant to 42 U.S.C. Section 6972(a)(1)(A), including actions or suits by the State of Ohio and its agencies. The U.S. DOE agrees that the State and its agencies are a "person" within the meaning of Section 7002(a) of RCRA.

C. In the event of any action filed under Section 7002(a) of RCRA alleging any violation of any requirements of this Order, it shall be presumed that the provisions of this Order including those provisions which address recordkeeping, reporting, and schedules of compliance are related to statutory requirements, regulations, permits, closure plans, or corrective action, and are thus enforceable under Section 7002(a) of RCRA. U.S. DOE shall have the burden of proving that any provision is not so related.

D. The Parties to this Order have the right to enforce the terms, conditions, and requirements of this Consent Order.

E. Any person not a party to this Order has the right to commence a civil action against any person who violates the terms, conditions and requirements of this Order to the extent provided in Section 310 of CERCLA, as amended, 42 U.S.C. Section 9659.

XXVI. STIPULATED PENALTIES LANGUAGE

U.S. EPA may assess a stipulated penalty against U.S. DOE in any of the following circumstances:

A. In the event that U.S. DOE fails to submit a primary document to U.S. EPA pursuant to the applicable schedule, or fails to comply with any other requirement of this Order, including specifications or standards, but not including schedules, which related to the implementation of: (a) Interim Remedial Measures (IRM) and an Interim Measures Plan (IMP); (b) a RCRA Facility Investigation (RFI); (c) a Corrective Measures Study (CMS); (d) the Corrective Measures Implementation (CMI); or related activities, including U.S. DOE's obligations under Section XI of the Order (Additional Work), then U.S. EPA shall issue a notice of intent to assess a stipulated penalty against U.S. DOE.

B. Primary documents are those submittals that are identified in the Attachments of this Order; or are required by U.S. EPA pursuant to Sections IX, X(C), or XI of this Order; or are listed below. Specifically, "primary documents" are those documents identified in Attachment I, pages 25 and 26, Attachment II, pages 11 and 12, and Attachment III, page 11. "Primary documents" are also draft and final Additional Work Plans required by U.S. EPA pursuant to Sections XI and X(D); draft and final Interim Measures Plans required by U.S. EPA pursuant to Sections IX(E)(3) and X(D); draft and final Interim Remedial Measures Reports required pursuant to Section X(C); and the following documents:

1. Draft and final Air RFI Reports, for the Facility-Wide Air RFI required to be implemented as Additional RFI Work, pursuant to Sections XI and X(C) of the Order;

2. Draft and final Corrective Measures Implementation Program Plan (CMI Work Plan), for each Quadrant, pursuant to Section IX(H)(3) of the Order, and CMI Task 15(C):

3. "Prefinal Design Submittal" and "Final Design Submittal" (to include major interim CMI milestones) pursuant to CMI Tasks 12(F)(6), 15(B)(2) and 15(C), and Section X(D) of the Order;

4. Draft and final Construction Quality Assurance Plans (including schedules for inspections, inspection reports, Major Interim Corrective Measures Reports, and other corrective measure reports), pursuant to CMI Tasks 14, 15(B)(3), and 15(C), and Section X(D) of the Order.

5. Major Interim Corrective Measure Reports required under the Construction Quality Assurance Plan, pursuant to CMI Task 14(E) and Section X(C) and X(D) of the Order, for the purpose of documenting compliance with major interim CMI milestones established in the Final Design Submittal.

6. Draft and final Corrective Measure Implementation Reports, pursuant to Sections X(C) and X(D) of the Order, and CMI Tasks 15(B)4 and 15(C).

C. U.S. DOE shall have thirty (30) days after receipt of the notice of intent to assess stipulated penalties to invoke dispute resolution under Section XXIX of this Order. If U.S. DOE does not invoke dispute resolution within this period, U.S. DOE will be deemed to have concurred in U.S. EPA's assessment of a penalty. U.S. EPA may assess penalties only after the conclusion of the dispute resolution period or following the conclusion of the dispute resolution proceedings which ever is later. Any such penalties shall relate back to the date of violation.

D. A stipulated penalty may be assessed in an amount not to exceed \$5000 for the first week (or part thereof), and \$10,000 for each additional week (or part thereof), for which a failure set forth in this Section occurs.

Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Order.

E. This Section shall not affect U.S. DOE's ability to request an extension of a timetable, deadline, or schedule pursuant to any Section of this Order in which U.S. DOE has a right to request such an extension, including Sections XXIX and XXX of this Order. Any modifications of the time for performance shall be in writing and require the prior approval of U.S. EPA. No penalty shall be assessed for a violation of a timetable, deadline for schedule caused by excusable delay as defined under the "Force Majeure" provision of this Order.

F. Nothing in this Order shall be construed to render any officer or employee of U.S. DOE personally liable for the payment of any stipulated penalty assessed pursuant to this Section.

G. Neither the filing of a petition to resolve a dispute nor the payment of penalties shall alter, in any way, U.S. DOE's obligation to continue and complete the performance required hereunder.

H. Upon payment by U.S. DOE of any penalty assessed under this Section, U.S. EPA will release U.S. DOE from any and all causes of action, claims, suits, and penalties U.S. EPA may have or may assess against U.S. DOE for the noncompliance.

I. All penalties shall be made payable by certified or cashier's check to the Treasurer of the United States, from funds authorized and appropriated for that specific purpose, and shall be remitted to:

United States Environmental Protection Agency
Region V
P.O. Box 70753
Chicago, Illinois 60673

All payments shall reference the name of the Facility, the name and address of U.S. DOE, and the docket number of this Order. Copies of the transmittal of payment shall be sent simultaneously to the U.S. EPA Project Coordinator.

J. The annual reports required by Section 120(e)(5) of CERCLA shall include, with respect to each final assessment of any stipulated penalty against U.S. DOE under this Order, each of the following:

1. The facility responsible for the failure;
2. A statement of the facts and circumstances giving rise to the failure;
3. A statement of any administrative or other corrective action taken at the relevant facility, or a statement of why such measures were determined to be inappropriate;
4. A statement of any additional action taken by or at the facility to prevent recurrence of the same type of failure; and
5. The total dollar amount of the stipulated penalty assessed for the particular failure.

K. Unless funds specifically appropriated for the full amount of stipulated penalties assessed under this Order have been appropriated at the time the penalties are assessed, U.S. DOE shall request such funds in its next budget request following any such assessment of stipulated penalties, and if necessary in each succeeding budget request until the funds are fully appropriated.

L. U.S. DOE and U.S. EPA agree that it is not now necessary to resolve the issue of whether U.S. DOE is liable for civil penalties under CERCLA Section 106 and that nothing in this Section shall be interpreted or construed as an admission by either party with respect to the issue of whether U.S. DOE is liable for civil penalties under CERCLA Section 106.

XXVII. ENVIRONMENTALLY BENEFICIAL PROJECT

A. Scope and Purpose. If U.S. DOE fails to comply with AOC requirements based exclusively upon CERCLA Section 106, U.S. DOE shall in

accordance with the procedures of this Section propose, obtain U.S. EPA approval for, and complete an environmentally beneficial project ("EBP"). This Section shall apply to the timely submittal of primary documents to U.S. EPA pursuant to the applicable schedules or failure to comply with any other requirement of this Order, including specifications or standards, but not including schedules, that related to the implementation of:

- (i) Interim Remedial Measures (IRM), and an Interim Remedial Measures Plan(IMP);
- (ii) a RCRA Facility Investigation (RFI);
- (iii) a Corrective Measures Study (CMS)
- (iv) the Corrective Measures Implementation (CMI); or
- (v) related activities, including U.S. DOE's obligations under Section XI of the Order (Additional Work).

B. Written Notice. When issuing a notice of U.S. DOE non-compliance with AOC requirements, U.S. EPA will specify in the notice whether U.S. DOE has failed to meet an AOC requirement which is based exclusively upon CERCLA Section 106 and that the Section XXVI stipulated penalties procedures apply. In accordance with the Section XXIX dispute resolution procedures, U.S. DOE may dispute any element of a U.S. EPA notice of violation, including whether the AOC requirements alleged to have been violated are required solely pursuant to CERCLA Section 106. In accordance with the Section XXIX dispute resolution procedures, if U.S. DOE fails to invoke dispute resolution within thirty days of receiving the U.S. EPA notice, U.S. DOE shall be deemed to have concurred with U.S. EPA's notice on the first day following the expiration of the thirty day period.

C. Proposal. Within sixty (60) days of the U.S. DOE concurrence with a U.S. EPA written notice or the conclusion of dispute resolution procedures, U.S. DOE shall submit to U.S. EPA a written EBP proposal which must include a description of the goal(s) and costs of, and schedule of

activities for, the proposed project. U.S. DOE must propose an EBP that will result in prevention or reduction, recycling, or environmentally safe treatment or disposal of pollution which is not otherwise required by any Federal, State, or local law. The proposed schedule of activities must include, among other things, the activities necessary for U.S. DOE to obtain funds specifically authorized and appropriated for implementation of the EBP.

D. Approval. Within thirty (30) days of receiving a U.S. DOE proposed EBP, U.S. EPA shall consider, among other things, whether the environmental benefits of the project ameliorate the effects of the noncompliance, the Congressional preference for pollution prevention and reduction expressed in the Pollution Prevention Act of 1990, 42 U.S.C. Sections 13101 et seq., and any applicable or relevant U.S. EPA guidance and either approve or disapprove the project. If U.S. EPA disapproves a proposed project, U.S. DOE shall have thirty (30) days to submit a revised or new proposed project. If U.S. DOE fails to obtain U.S. EPA approval for an EBP by no later than one-hundred and fifty (150) days after the date of U.S. DOE concurrence with a U.S. EPA written notice or the conclusion of dispute resolution procedures, U.S. EPA may invoke the AOC Section XXIX dispute resolution procedures.

E. Anti-Deficiency Act. Nothing in this Section shall be construed as a requirement that U.S. DOE obligate or pay funds in contravention of the Anti-Deficiency Act, 31 U.S.C. Section 1341. U.S. DOE must specify in the schedule of activities included with its proposed EBP those activities necessary to make requests in Congress for appropriations to fully implement the EBP.

F. Costs. The parties shall use the following table for the purpose of determining the minimum cost of an EBP:

Type of Project	Amount Per Day of Noncompliance
Pollution Prevention/Reduction	\$ 750
Pollution Recycling	\$1,000

Environmentally Safe Treatment of Pollution	\$1,250
Environmentally Safe Disposal of Pollution	\$1,500

Each of the project types specified above shall be defined consistent with the provisions of the Pollution Prevention Act of 1990, 42 U.S.C. Sections 13101 et seq. When implementing an approved EBP, U.S. DOE shall use funds which have been specifically authorized and appropriated for that purpose. U.S. DOE, in its sole discretion, may supplement authorized and appropriated funds for EBPs; however, such supplemental funds shall not be drawn from funds required to fulfill any other obligation of U.S. DOE under this Order or the 1989 Consent Decree with the State of Ohio.

G. Performance. If U.S. DOE fails to substantively and/or timely complete a U.S. EPA approved EBP, U.S. EPA may issue a written notice of non-compliance to U.S. DOE and, pursuant to the procedures and requirements of this Section, U.S. DOE may be required to perform additional EBPs. By mutual written agreement, the parties may provide additional completion time and/or amend substantive requirements of the EBP. Any dispute that may arise from U.S. EPA non-concurrence with U.S. DOE requested extension or modification shall be subject to the Section XXIX dispute resolution procedures.

H. Reservations. Nothing in this Section shall be interpreted or construed as an admission by either party with respect to the issue of whether U.S. DOE is liable for civil penalties under CERCLA Section 106.

XXVIII. FORCE MAJEURE

A. U.S. DOE shall perform the requirements of this Order within the time limits set forth herein, unless the performance is prevented or delayed by events which constitute a force majeure. U.S. DOE shall have the burden of proving such a force majeure. A force majeure is defined as any event arising from causes not foreseeable and beyond the control of U.S. DOE which could not be overcome by due diligence and which delays or prevents performance by the date required by this Consent Order. Such events do not include increased

costs of performance, changed economic circumstances, normal precipitation events, or failure to obtain Federal, State or Local permits. It shall be presumed, for purposes of this Order, that delays due to compliance with applicable statutes and regulations governing procurement, despite the exercise of reasonable diligence, are unforeseeable and beyond the control of U.S. DOE.

B. U.S. DOE shall notify U.S. EPA and OEPA in writing seven (7) days after it becomes aware of events which U.S. DOE knows or should know constitute a force majeure. Such notice shall estimate the anticipated length of delay, including necessary demobilization and remobilization, its cause, measures taken or to be taken to minimize the delay, and an estimated time table for implementation of these measures. Failure to comply with the notice provisions of this section shall constitute a waiver of U.S. DOE right to assert a force majeure.

C. If U.S. EPA determines that the delay has been or will be caused by circumstances not foreseeable and beyond U.S. DOE's control, which could not have been overcome by due diligence, the time for performance for that element of the relevant scope of Work may be extended, upon U.S. EPA approval, for a period equal to the delay resulting from such circumstances. This shall be accomplished through an amendment to the appropriate schedule of this Consent Order. Such an extension does not alter the schedule for performance or completion of other tasks required by any work plan unless these are also specifically altered by amendment of the schedule. In the event that U.S. EPA, OEPA, and U.S. DOE cannot agree that any delay or failure has been or will be caused by circumstances not reasonably foreseeable and beyond the control of U.S. DOE, which could not have been overcome by due diligence, or if there is no agreement on the length of the extension, the dispute shall be resolved in accordance with the Dispute Resolution provisions of Section XXIX of this Order.

XXIX. DISPUTE RESOLUTION

If a dispute arises as to any part of this Order, the procedures of this Section shall apply. In addition, during the pendency of any dispute, U.S. DOE agrees that it shall continue to implement those portions of this Order which are not in dispute and which U.S. EPA determines can be reasonably implemented pending final resolution of the issue(s) in dispute. All parties of this Order agree they shall make reasonable efforts to informally resolve all disputes at the project coordinator or immediate supervisor level. If resolution of the dispute cannot be reached, the following procedures shall be implemented:

1. U.S. DOE shall, within thirty (30) days of the date of the U.S. EPA action of Written Notice of Position on a matter which leads to or generates the dispute, submit to U.S. EPA and OEPA in writing: (1) a statement describing the dispute; (2) a brief description of U.S. DOE's position with respect to the dispute; (3) the Work affected by the dispute; and (4) a copy of the pertinent references and other information that U.S. DOE is relying on to support its position. If U.S. DOE does not submit such documentation to U.S. EPA within this 30-day period, the U.S. DOE shall be deemed to have agreed to U.S. EPA's position.

2. Upon receipt of the written statement of dispute, the parties shall engage in dispute resolution among the Project Coordinators and/or their immediate supervisors. The U.S. EPA and the U.S. DOE, in consultation with OEPA, shall have ten (10) days from the receipt by the U.S. EPA and OEPA of the written statement of dispute to resolve the dispute. During this period, the Project Coordinators shall meet as many times as necessary to discuss and attempt resolution of the dispute. If agreement cannot be reached on any issue within this ten-day period, U.S. DOE may within ten (10) days of the conclusion of the 10-day dispute resolution period, submit a written notice to U.S. EPA and OEPA escalating the dispute to the Dispute Resolution Committee (DRC) for resolution. If U.S. DOE fails to elevate the dispute to the DRC

within this 10-day escalation period, U.S. DOE shall be deemed to have agreed with U.S. EPA's position with respect to the dispute.

3. The DRC will serve as forum for resolution of review and resolve disputes for which agreement has not been reached pursuant to Paragraphs 1 or 2 of this Section. The U. S. EPA and the U.S. DOE shall each designate one individual and an alternate to serve on the DRC. OEPA shall designate a representative and an alternate to serve as a consultant to the DRC. The individuals designated to serve on the DRC, or as a consultant to the DRC, shall be employed at the policy level (SES or equivalent) or be delegated the authority to participate on the DRC for the purposes of dispute resolution under this Order. Following escalation of a dispute to the DRC as set forth in Paragraph 2, the DRC shall have thirty (30) days to unanimously resolve the dispute. If the U.S. EPA and the U.S. DOE are unable to resolve the dispute within this 30-day period, U.S. DOE may within ten (10) days of the conclusion of the 30-day dispute resolution period submit a written notice of dispute to the Administrator of U.S. EPA, or his designee, for a final resolution of the dispute in accordance with all applicable laws and procedures. In the event that the dispute is not escalated to the Administrator of U.S. EPA within the designated 10-day escalation period, the U.S. DOE shall be deemed to have agreed with the U.S. EPA DRC representative's position with respect to the dispute.

4. Upon escalation of a dispute to the Administrator of U.S. EPA pursuant to Paragraph 3, the Administrator will review and resolve such dispute as expeditiously as possible. Upon resolution, the Administrator shall provide U.S. DOE with a written final decision setting forth resolution of the dispute.

5. The U.S. EPA representative on the DRC is the Waste Management Division Director of U.S. EPA's Region V. The U.S. DOE designed member is the Assistant Manager for Enrichment Facilities, Oak Ridge Operations Office. The OEPA designated consultant is either the Chief, Division of Emergency and

Remedial Response, or the Chief, Division of Hazardous Waste Management.

Notice of any delegation of authority from a party's designated representative on the DRC shall be provided to all other parties.

6. The pendency of any dispute under this Section shall not affect the U.S. DOE's responsibility for timely performance of Work required under this Order, except that the time period for completion of Work affected by such dispute shall be extended for a period of time not to exceed the actual time taken to resolve any good faith dispute in accordance with the procedures specified herein. All elements of the Work required by this Order which are not affected by the dispute shall continue and be completed in accordance with the applicable schedule. The determination of elements of Work, submittals, or actions affected by the dispute shall be determined by U.S. EPA and shall not be subject to dispute under this Section.

7. Within fourteen (14) days of resolution of a dispute pursuant to the procedures specified in this Section, the U.S. DOE shall incorporate the resolution and final determination into the appropriate plan, schedule, or procedures and proceed to implement this Order according to the amended plan, schedule, or procedures.

8. Resolution of a dispute pursuant to this Section of the Order constitutes a final resolution of any dispute arising under this Order. The U.S. DOE shall abide by all terms and conditions of any final resolution of dispute obtained pursuant to this Section of this Order.

XXX. EFFECTIVE DATE AND SUBSEQUENT MODIFICATION

A. The effective date of this Order shall be seven (7) days from the day on which it is signed by U.S. EPA or the date on which concurrence by the Attorney General is received by U.S. EPA, whichever is later.

B. Any party may request modifications to this Order and all such modifications shall be by mutual agreement of the parties. However, in the event U.S. EPA and OEPA cannot reach mutual agreement on a modification, U.S. EPA and U.S. DOE may modify the Order without the assent of OEPA and OEPA

shall have the option to withdrawal as a party to this Order. Modifications to this Order shall be in writing and shall have as the effective date that date on which such modifications are signed by U.S. EPA, and shall be incorporated by reference into this Order. U. S. DOE, OEPA, and U. S. EPA Project Coordinators have the authority to approve modification of schedules contained in or required by this Order; all other modifications must be approved by the Regional Administrator and an equivalent U.S. DOE and OEPA official.

C. Any reports, plans, specifications, schedules, and attachments required in this Order are, upon approval by the U.S. EPA, incorporated into this Order.

D. No informal advice, guidance, suggestions or comments by U.S. EPA or OEPA regarding reports, plans, specifications, schedules, and any other writing submitted by the U.S. DOE may be construed as relieving U.S. DOE of its obligations to obtain such formal approval as may be required by this Order.

E. Upon demonstration of compliance by U.S. DOE with this Order, there will be a continuing obligation to comply with applicable permit requirements and other requirements under the relevant statutes.

F. Notwithstanding the provisions of Paragraph B above, in any dispute subject to dispute resolution the Parties may, by written agreement, modify the procedures of Section XXIX, Paragraphs 1 through 3, including but not limited to an extension or shortening of the times therein, without formal amendment of this Order.

XXXI. NOTICE TO THE STATE

U.S. EPA has notified the State of Ohio pursuant to Section 106(a) of CERCLA, 42 U.S.C. Section 9606(a).


XXXII. TERMINATION AND SATISFACTION

The provisions of this Consent Order shall be deemed satisfied upon U.S. DOE's receipt of written notice from U.S. EPA that U.S. DOE has

demonstrated, to the satisfaction of U.S. EPA, that the terms of this Consent Order, including any additional tasks which, subject to the limitations set forth herein, U.S. DOE has agreed to undertake, have been satisfactorily completed. U.S. EPA shall issue such notice after it has been determined that all requirements of this Consent Order have been satisfactorily completed. The parties intend that any corrective action selected, implemented and completed to remediate Hazardous Waste, Hazardous Constituents, and hazardous substances contamination identified under this Order shall be protective of human health and the environment such that the corrective action covered by this Order shall obviate the need for further corrective remediation of that contamination.

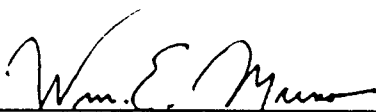
IT IS SO AGREED:

By:


U.S. Department of Energy

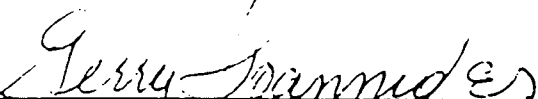
6-15-94
Date

By:


U.S. Environmental Protection Agency

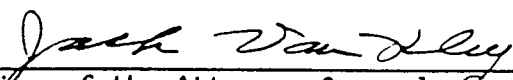
8-4-94
Date

By:


Ohio Environmental Protection Agency

6-30-94
Date

By:


Office of the Attorney General,
State of Ohio

6-22-94
Date